

REMARKS

As a preliminary matter, Applicant acknowledges the indication of allowability of claims 6 and 3. Further, claim 15 is objected to due to informalities, specifically, the phrases “one of said at least one groove” and “two of said at least one groove” are awkward. Claim 15 has been amended to recite “one of said grooves” and “two of said grooves” to address the objection. It is believed that the claim would have been understood in its originally written form, but Applicant agrees that the amended language places the claim in a better form. The scope of the claims remains the same.

Claims 1, 5-12 and 15 stand rejected under 35 U.S.C. §112 as failing to set forth the subject matter which Applicant regards as his invention. Particularly, the Examiner states that claims 1 and 12 fail to correspond in scope with that which the Applicant regards as the invention as found on page 4, line 5 to page 5, line 3. Claims 1 and 12 have been amended to more clearly describe the subject matter which Applicant regards as the present invention.

Claims 1, 5-12 and 15 stand rejected under 35 U.S.C. §102(e) as being anticipated by Lakshmikumaran et al. (U.S. 6,282,055). Applicant respectfully traverses this rejection because the Lakshmikumaran et al. reference fails to disclose (or suggest) a head “wherein each of said grooves has a width which is greater than or equal to a width of a wall portion separating said grooves on both sides of each said read/write gap line, and a depth which is greater than or equal to said width of said grooves.” One example of such a head for a magnetic tape is disclosed in Applicant’s Figures 2 and 5, which show a depth of a

groove, “d”, which is greater than or equal to a width of the groove, “w”, which is greater than or equal to a width of a wall portion separating said grooves, “g” ($d \geq w \geq g$).

In contrast, the head in the Lakshmikumaran et al. reference does not have this dimensional relationship. Instead, Lakshmikumaran et al. merely discloses a depth of a groove, “d”, which is greater than a width of the groove, “w”, and a width of a wall portion separating the grooves, “g”, which is larger than “w” ($d > g > w$).

The dimensions of “d” and “w” of the Lakshmikumaran et al. reference are preferably .007 inches and .015 inches, respectively (col. 3, lines 21-23). Further, each transverse slot of the modules has a centerline that is preferably located .008 inches from the module’s respective read/write gap line (col. 3, lines 23-26). Calculation of the “g” dimension can easily be made by subtracting half of the width of the groove “w” from the distance from the centerline of the groove to the gap, which results in one half the dimension of the wall, and multiplying the result by 2 for the full width of the wall. The calculation of the preferable dimension “g” is as follows: $g = (.008 - (.007/2)) \times 2 = .009$. Since the Lakshmikumaran et al. reference only discloses the dimensional relationship of $d > g > w$, the dimensional relationship of the present invention, $d \geq w \geq g$, is not disclosed.

Further, contrary to the Examiner’s assertion, Lakshmikumaran et al. does not disclose a head for a magnetic tape wherein the grooves have a width which is greater than a width of a wall portion. The Examiner has only dimensioned part of the wall between the gap 18 and the edge 24 to get the dimension “g”. Nowhere does the limitation read that “g” is only the portion of the wall between the gap and the edge. On the contrary, the limitation

recites that the grooves have a width which is greater than or equal to a width of a wall portion separating said grooves on both sides of the gap. Since the wall portion is on both sides of the gap, “g” is not the dimension between the gap and the edge, but the entire wall portion from edge to edge. This dimension “g” is further shown in Fig. 1 where the “g” is measured from edge to edge of the wall portion.

Moreover, Figs. 1-5 of the reference show the wall portion separating the grooves to be greater than the width of the groove and smaller than the depth of the groove. This relationship does not meet the present claim language.

Furthermore, Lakshmikumaran et al. does not disclose or suggest the phenomenon that, when the dimensions “d”, “w” and “g” have the specific relationship of the present invention, there is a significant influence on the amount of tape floating when the magnetic tape is traveling at a high rate of speed. The present invention effectively utilizes this phenomenon to reduce the amount of tape floating, which increases efficiency of reading and writing operations.

Lakshmikumaran et al. merely addressed problems relating to tape separation by including bleed slots in combination with multiple transverse slots, to effectively reduce separation losses, where the present invention uses the specific relationships between the dimensions “d”, “w” and “g”. Thus, the reference teaches away from the solution discovered by Applicant.


For all of these reasons, Applicant requests withdrawal of the rejection of independent claims 1 and 12 and associated dependent claims 3-11 and 14-15.

For all the above reasons, Applicant believes that this case is in condition for allowance, which is respectfully requested. The examiner should call Applicant's attorney if an interview would expedite prosecution.

Respectfully submitted,

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